

Emerging Economy Sourcing: Exploring the Use of Purchasing Teams and Enforcement of Supplier Social Practices

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Abstract

As firms search the world for suppliers that provide the best combination of cost, quality and latest technology, they have been confronted with the challenges of managing the sustainability performance of their global supply chains. Specifically, companies have come under increased scrutiny from various stakeholder groups for the labour and human rights practices of suppliers located in emerging economies. Drawing on the sustainability, supplier relationship management, and stakeholder literatures, this research examines the relationship between emerging economy sourcing, the use of purchasing teams, and the impact on enforcement of supplier social practices, and firm financial performance. Using data from a survey and archival sources from a sample of large U.S. firms, findings confirm the mediated role of the use of purchasing teams resulting in better enforcement of supplier social practices and improved firm performance. Findings also provide important implications for supply chain and purchasing executives. While the results of this research demonstrate the performance benefits of sourcing from emerging economies, findings also suggest that organizations should make investments to support capabilities related to enforcement of supplier social practices. Opportunities for future research are also identified.

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1 Introduction

Global sourcing was once considered too risky a proposition for many companies, who preferred instead to purchase goods and services from local suppliers. However, the last three decades has seen significant increases in global trade as competitive pressures have forced companies to search the world for the best quality and latest technology at the lowest cost. For example, the global export volume of trade in goods increased from \$3.5 trillion in 1990 to \$16.0 trillion in 2016 (United Nations Conference on Trade and Development, 2018). A number of factors have contributed to the increase in global sourcing, including improvements in the global transportation infrastructure, developments in e-commerce, and expansion of trade agreements (Johnson and Flynn, 2015). For many firms, the primary driver for global sourcing has been to achieve cost reductions, which has resulted in an increased interest in sourcing from emerging regions, sometimes referred to a low-cost country sourcing (Kusaba et al., 2011). As a consequence, trade between advanced economies and emerging economies increased from 32 percent of total international merchandise trade in the early 1990s to 45 percent today (Loesche, 2017).

However, the evolution to sourcing from emerging economies has presented a new set of challenges for procurement organizations (Mani and Gunasekaran, 2018; Silvestre, 2015). First, it is essential that the procurement organization is aware of supplier social practices and their compliance with regulations and corporate codes of conduct, as a means of managing risk (Reuter et al., 2010). Brands have come under increased scrutiny from various stakeholder groups for their global sourcing policies, accused of turning a blind eye to questionable labour and human rights practices of some suppliers (Huq et al., 2016). For example, a 2016 Amnesty International report documented that cobalt used in batteries for smartphones and electric cars was mined in inhumane conditions, in some cases using child labour. The resulting concerns regarding human rights abuses in Congo cobalt mines have put pressure on more than 20 global manufacturers, including Apple

and Volkswagen, to change their sourcing practices. In reaction, many of these companies have taken steps to audit their suppliers and have sent teams to Congo to address the problems (Patterson and Wexler, 2018).

Second, there are unique challenges in managing collaborative efforts with suppliers in emerging regions to improve supply chain performance, including achieving better social outcomes (Klassen and Vereecke, 2012; Mani et al., 2018). In many cases, these buyer-supplier relationships are in the early stages of development. Investments must be made in building relationships, creating processes and systems to share information, and establishing shared goals and objectives. Distance and differences in culture and language compound these challenges.

To overcome these challenges, previous research advocates socially responsible procurement, which refers to the inclusion of social issues, advocated by organizational stakeholders, in purchasing decisions (Maignan et al., 2002). Approaches used by firms include the adoption of market-based and process-based socially responsible procurement practices (Marshall et al., 2016). While, market-based socially responsible procurement practices focus on engagement of external stakeholders groups through fundamental changes to corporate social responsibility strategies (Marshall et al., 2016), the the focus of this research is on process-based socially responsible procurement practices, which represents the most widely-adopted approach by firms to manage supplier social sustainability performance (Gualandris et al., 2015; Marshall et al., 2016). These practices include establishing supplier codes of conduct and monitoring supplier social performance through audits and third-party certifications, and are typically arm's-length, taking place outside the buying firm. The principal objective is frequently minimizing risk to the buying firm to ensure compliance with regulatory standards and buyer codes of conduct (Reuter et al., 2010; Klassen and Vereecke, 2012). In addition, there are circumstances where these practices can

involve buyer-supplier collaboration aimed at improving social outcomes, such as investments in supplier development activities meant to assist suppliers in acquiring processes and systems to achieve compliance with regulations or to improve sustainability performance (Hollos et al., 2012). Market-based socially responsible procurement practices are generally initiated at the corporate level with a focus on managing expectations and fulfilling demands of external stakeholder groups such as NGOs and regulators. As such, market-based socially responsible procurement practices fall outside the scope of this study, as our focus is on implementation of socially responsible procurement through enforcement of social practices.

Drawing on the sustainability, supplier relationship management, and stakeholder literatures, the objective of this research is to provide academic and managerial insights on socially responsible procurement practices at large U.S. firms by examining the relationship between emerging economy sourcing, the use of purchasing teams, and the impact on enforcement of process-based supplier social practices, and firm performance. More formally, the research question addressed in this study is: What is the impact of purchasing teams on enforcement of policies and procedures related to labour and human rights practices for suppliers operating in emerging economies?

In doing so, this paper makes three contributions. First, this research fills a gap in the socially responsible procurement literature by examining the enhanced role of purchasing activities to influence process-based supplier social practices. While previous research has emphasized practices used by firms to manage social sustainability performance in their supply chains, such as supplier monitoring (e.g., Gualandris et al., 2015) and supplier development (e.g. Busse et al., 2016), this study examines the specific role of purchasing activities on supplier social practices. Second, the study investigates the mediating role of purchasing teams on the relationship between

emerging economy sourcing and enforcement of supplier social practices. While there are reasons to believe that firms sourcing from emerging economies should focus on developing socially responsible supplier operations, the role of purchasing teams in such efforts is unclear. Third, this study explores the performance benefits of sourcing from emerging economies and provides an improved understanding of how emerging economy sourcing influences the extent that firms make investments to support capabilities related to enforcement of supplier social practices.

The rest of the paper is structured as follows. Section 2 provides the theoretical foundation for the research and hypothesis development. Section 3 outlines the methodology and scale development. Section 4 has the results of the research, Section 5 discusses the findings and limitations of the research, and Section 6 provides concluding comments, including limitations and future research opportunities.

2 Literature Review

The theoretical model proposed in this research is provided in Figure 1 and its development is discussed in the following sections.

Insert Figure 1 Here

2.1 Emerging Economy Sourcing and Purchasing Teams

The importance of global sourcing and the trend of increased sourcing from emerging regions are well-documented in the literature (Kusaba et al., 2011; Trent and Monczka, 2003). For example, the World Trade Organization reported that the United States imported goods totaling \$2.25 trillion in 2016 (World Trade Organization, 2017), and U.S. imports from China alone have increased from \$100 billion in 2000 to \$506 billion in 2017 (US Census Bureau, 2018). Academics and practitioners have examined the many advantages, disadvantages, and risks of global sourcing (e.g.

Kamann and Van Nieulande, 2010; Kusaba et al., 2011). The attraction of global sourcing includes lower prices, access to new technology, improved quality, and necessity (e.g., not available locally). Disadvantages and risks include higher total costs of ownership, longer lead times, foreign exchange rate exposure, and complexities of logistics, transportation, and tariffs/duties (Johnson and Flynn, 2015).

For the purposes of this research, *global sourcing* represents the acquisition of goods and services from suppliers physically located in a different region, such as a North American firm purchasing components from Europe or Asia. *Emerging economy sourcing* is a subset of global sourcing, defined as a firm from a developed country purchasing goods or services from suppliers located in an emerging economy (Kusaba et al., 2011). An emerging economy is defined as country with a rapid pace of economic development and government policies that favor economic liberalization and the adoption of a free market system, such as China, Vietnam, or Brazil (Arnold and Quelch, 1998).

Stakeholder theory represents an appropriate theoretical lens to examine the relationships between emerging economy sourcing, the use of purchasing teams, and the impact on enforcement of process-based supplier social practices. It is concerned with the reciprocal relationships between a firm and its many stakeholders (Freeman, 1984), and has been used extensively in socially responsible procurement research (e.g. Gualandris et al., 2015; Shafiq et al., 2014). Organizations typically do not have enough resources to scan the environment to assess the broader impact of its activities on society, but are better able to monitor demands of identifiable stakeholder groups (Clarkson, 1995). In this way, stakeholders represent agents that identify broad social demands for individual organizations (Maignan and Ralston, 2002). Engaging stakeholders can provide

feedback regarding opportunities to improve supply chain social processes, thereby making the management of social issues more practical (Mani and Gunasekaran, 2018).

Empirical research indicates that firms tend to adopt cross-functional integration to improve the effectiveness of global sourcing initiatives (Stanczyk et al., 2015). Integration of internal stakeholders, including cross-functional engagement, and external stakeholders, such as customers and suppliers, improves coordination, provides for efficient resource utilization and helps align goals and objectives. *Purchasing teams* is a common approach to improve the sourcing process through the integration of different stakeholder groups (Horn et al., 2014). The application of purchasing teams within the supply chain is quite broad, including managing new product development projects, quality improvement initiatives, cost reduction programs and global sourcing (Horn et al., 2014; Trent and Monczka, 1998).

Johnson et al., (2002) identified a construct for purchasing teams consisting of purchasing councils, supplier councils, commodity teams and cross-functional teams. The common element among the four items in this construct was that they were concentrated and organized within the firm and/or the supplier for the purposes of procurement. Using the same construct, Johnson et al., (2007) examined the relationship between purchasing team usage and e-business technology adoption, and found a broad role for purchasing teams.

Generally, cross functional purchasing teams consist of representatives from a variety of functional areas—such as operation, logistics, finance/accounting and marketing—and represent a method to enhance internal integration through the involvement of non-procurement personnel (Trent and Monczka, 1998). In contrast, purchasing councils are teams comprised of senior purchasing staff from within the organization, and are used to share information among decentralized business units, plants or departments (Johnson and Flynn, 2015). A third form of

purchasing teams, commodity teams, are formed to focus on a significant annual purchase expense that is viewed as complex and critical for the organization's success, and may be cross-functional or include purchasing personnel only (Monczka et al., 2015). While cross functional purchasing teams, purchasing councils and commodity teams are methods to enhance internal integration, supplier councils are formed to achieve external integration. Supplier councils are a team made up of senior purchasing executives from the buying firm and 10-15 senior executives from the company's supplier base, with the objective of improving purchasing performance through improved supplier communication and providing a forum to obtain buy-in and feedback from suppliers for major initiatives (Johnson and Flynn, 2015). In summary, purchasing teams represent a variety of functions with the purpose of streamlining procurement activities.

As discussed earlier, emerging economy sourcing, as a subset of global sourcing, presents unique challenge. These challenges are exacerbated by cultural distance, geographic separation, and organizational distance (i.e. number of tiers in the supply chain) (Awaysheh and Klassen 2010). As geographic and cultural distance expands, organizations have more difficulty interacting and communicating with suppliers, thus increasing the potential for misunderstandings and problems. As organizational distance increases, the number of relationships that must be managed and the volume of transactions increases, thereby adding complexity. Collectively, increased distance necessitates the need for greater investments in mechanisms aimed at providing internal and external integration, which can be accomplished through expanded use of purchasing teams.

In addition, while sourcing decisions were traditionally made on an assessment of the best value for a combination of cost, quality and delivery, recent research has also found that stakeholder pressures are forcing organizations to evaluate supplier sustainability capabilities, thereby adding another layer of complexity for emerging economy sourcing (Shafiq et al., 2017).

It is therefore unlikely that one person or function in the organization possesses the ability, skills, and knowledge to manage all the activities and challenges involved in an emerging economy sourcing initiative. Purchasing teams provide access to the capabilities and resources of internal and external stakeholders that span multiple functions and subunits, and represents one method to effectively address the complex issues associated with successfully managing emerging economy sourcing activities. Hence, expansion of emerging economy sourcing activities necessitates increased use of purchasing teams (Trent and Monczka, 2003), and therefore we propose:

H1: Emerging economy sourcing is positively related to the use of purchasing teams increases.

2.2 Supplier Social Practices

A critical aspect of procurement is the ability to manage risks and avoid supply disruptions. Research on global sourcing has focused on operational and financial risks, such as delivery (e.g., supplier on-time delivery, material shortages, and capacity), quality (e.g., defect rates), and cost (e.g., prices and foreign exchange exposure) (Zsidisin et al., 2000). As previously established, stakeholder theory is concerned with the relationships between an organization and its stakeholders, including some of the performance outcomes of these relationships, and has been one of the main theoretical lens used in sustainability research (e.g. Gualandris et al., 2015; Shafiq et al., 2014). Firms are facing increased pressure from stakeholder groups—such as customers, investors, regulators, NGOs, media, and the public—who expect organizations to ensure that their supply chains and their suppliers operate in an ecologically and socially responsible manner (Kocabasoglu et al., 2007). For example, research by Harwood and Humby, (2008) found that sustainability emerged as a significant risk for the respondents in their survey. More recently,

sustainability performance has been included as a key consideration for procurement in the supplier selection process (Shafiq et al., 2017).

While supply chain sustainability performance includes both environmental and social dimensions (Gimenez et al., 2012), the focus of this paper is on social sustainability. Research in the socially responsible procurement literature has examined firm practices in one or more of five broad categories: human rights, labour practices (including safety), community, diversity and ethics (Carter, 2000; Carter and Jennings, 2004; Zorzini et al., 2015). Among these, supplier human rights and labour issues are common process-based socially responsible practices monitored by procurement organizations to ensure compliance with regulations and buyer codes of conduct (Klassen and Vereecke, 2012; Marshall et al., 2016). The definitions used in this paper are based on the research by Awaysheh and Klassen (2010) and Shafiq et al. (2014). *Labour practices* represents the extent to which practices are in place to ensure that suppliers provide a basic safe work environment and contribute to the overall welfare of employees. Examples include workplace health and safety, fair wages (including overtime pay) and policies against discrimination. *Supplier human rights* is defined as the extent to which practices are in place to ensure that suppliers do not exploit vulnerable groups, such as children and forced labour, and do not use sweatshop labour.

Managing supplier social sustainability performance is particularly challenging for firms with suppliers located in emerging economies, where regulations and accepted practices differ, in some cases significantly, from developed regions. In these circumstances, stakeholder pressure motivates the buying firm to shoulder part of the responsibility for setting social policies and standards that would otherwise be the responsibility of government organizations in developed regions (Huq et al., 2016). Enforcement of process-based labour and human rights practices can

be achieved through a combination of an arm's-length approach and / or through collaborative methods. Monitoring and third-party certifications (e.g., SA 8000), represent common arm's-length methods used by firms to enforce policies and standards related to supplier social sustainability performance for suppliers located in emerging economies. This approach involves setting standards and establishing processes, such as audits, to ensure compliance with industry or international standards, or with buyer codes of conduct (e.g., Gualandris et al., 2015; Mamic, 2005). In addition, enforcement can also be accomplished through collaborative activities, such as investments in supplier development activities that assist suppliers in developing capabilities to improve their social sustainability performance (Busse et al., 2016; Lu et al., 2012).

While it is expected that firms sourcing from emerging economies should be cognizant of irresponsible supplier practices, recent research has also documented examples of organizations that have failed to make appropriate investments in resources directed towards enforcement of policies for supplier labour and human rights practices (Huq et al. 2014). Possible explanations include ineffective stakeholder engagement, lack of commitment of the buying firm, and the cost of enforcement relative to the expected benefits. However, we expect that firms will tend to respond to stakeholder pressures, and therefore firms dealing with suppliers from emerging economies will increase the use of arm's-length and collaborative approaches as a means of managing supply chain social sustainability performance. Hence, we propose:

H2a: Emerging economy sourcing is positively related to the enforcement of policies related to supplier human rights practices increases.

H2b: Emerging economy sourcing is positively related to the enforcement of policies related to supplier labour practices increases.

The creation and enforcement of policies related to supplier labour and human rights practices in emerging economies are multifaceted. Addressing the complexity of supply chain social practices is complex and dynamic in nature—what is considered a leading practice today might be regarded as unacceptable in the future (Martin, 2002). As such, acceptable standards for social performance evolve, influenced by global events and changing expectations of stakeholder groups, such as employees, suppliers, NGOs, customers, and regulators.

As discussed earlier, purchasing teams represent one method to enhance internal and external integration through the involvement of non-procurement personnel and suppliers, and prior research has found that cross-functional teams are ideal for managing complex organizational tasks that require attention over extended periods (Lovelace et al., 2001). However, research has also found a trend for increased outsourcing of procurement activities as a means to reduce administrative costs and achieve price savings by combining purchase volumes with other organizations (Johnson et al. 2014). In some circumstances, the need to outsource global procurement processes is required because appropriate expertise is not available internally (Johnson and Flynn 2015). Adopting an outsourcing strategy for emerging economy sourcing may preclude or reduce the involvement of purchasing teams.

Nonetheless, arm's-length approaches to enforcing process-based socially responsible procurement practices still require cross-functional involvement and buy-in from internal organizational stakeholders. For example, agreement is required regarding acceptable standards and methods of accreditation and auditing. In addition, collaborative approaches require involvement of suppliers, either through their inclusion on cross functional teams as part of a supplier development initiative or on supplier councils to provide feedback and input on new standards, policies or processes. The use of purchasing teams remains a common method to engage

internal stakeholders and suppliers (Trent and Monczka, 2003). Thus, in addition to the previous discussion regarding the relationships between emerging economy sourcing, purchasing team use and enforcement of supplier social practices, we expect that purchasing teams mediate the relationship between emerging economy sourcing and supplier social practices. Hence:

H3a: Use of purchasing teams will mediate the relationship between emerging economy sourcing and enforcement of policies related to supplier labour practices.

H3b: Use of purchasing teams will mediate the relationship between emerging economy sourcing and enforcement of policies related to supplier human rights practices.

2.3 Emerging Economy Sourcing and Firm Performance

As established earlier, both the advantages and disadvantages and risks of global sourcing are well-documented in the literature, and findings are ambiguous regarding the impact on firm performance, suggesting that using low labour cost suppliers does not always translate into the lowest total costs (Stanczyk et al., 2015). For example, research by Horn et al. (2013) found that more than three-quarters of the China sourcing projects studied failed to provide the expected benefits. Possible explanations include poor implementation and decision-making biases, which lead to problems when executing emerging economy sourcing initiatives. Contributing factors can be a lack of qualified personnel to manage the procurement process and overlooking important cost and logistical factors (Stanczyk et al., 2015). As a result, the underlying reasons for the failure emerging economy sourcing initiatives to deliver performance benefits can be related to issues of operational execution (Kusaba et al., 2011).

Previous research has also identified the several potential performance benefits of emerging economy sourcing. While cost is frequently cited as a major attraction because of low wage rates (Kusaba et al., 2011), there are also additional potential advantages, including access to distinct or

unique resources not available domestically and access to suppliers with superior capabilities, including technology and product expertise (Johnson and Flynn, 2015). For example, industry clusters, such as electronics in Mexico and garment manufacturing in Bangladesh, represent regions where there is a concentration of a large number of interconnected firms with the capabilities to provide low cost, high quality products and services, at high volumes (Porter, 1998). Lastly, firms are able to establish business relationships in the region and gain knowledge of local business practices, including distribution channels and local regulations, creating opportunities for increased sales and market expansion (Mani et al., 2018).

Therefore, while the supply chain literature provides anecdotal evidence of both the performance advantages and disadvantage of global sourcing, there is growing empirical research showing that global sourcing does improve firm performance. For example, Schiele et al., (2011) found that global sourcing projects saved an average of 3.4 percent compared to domestic sourcing, supporting other research that has found a positive relationship between global sourcing and firm financial performance (e.g., Trent and Monczka, 2003). In addition, there is also a growing research stream that has identified the performance benefits of emerging country sourcing (Mani et al., 2018; Moser et al., 2018). Therefore, we propose that:

H4a: Emerging economy sourcing positively influences firm performance.

Purchasing teams, as previously proposed, represent a key enabler of internal and external stakeholder engagement. For the purposes of this research, stakeholder groups are both internal (e.g., cross-functional groups) and external (e.g., suppliers). While the literature has demonstrated the performance benefits of purchasing teams in supply chain management (e.g., Enz and Lambert, 2015), there is also extensive research on cross-functional teams in the organizational behavior literature. This research stream has found that the use of cross-functional teams leads to improved

decision-making for complex tasks when compared to individuals and homogeneous teams (Edmondson and Nembhard, 2009). As a result, we propose that:

H4b: Purchasing team use positively influences firm performance.

Although empirical research has established linkages between environmental sustainability and firm performance (e.g. Montabon et al., 2007; Shafiq et al., 2017), the business case for investments in social sustainability initiatives is weaker, with much of the research relying on anecdotal evidence or case studies (Zorzini et al., 2015). While research has identified the theoretical long-term performance benefits of investments in social sustainability (e.g. Carter and Easton 2011; Esfahbodi et al. 2016), the measurement of the economic benefits these initiatives can be complex. Furthermore, the benefits can be less tangible. For example, investments in initiatives directed towards enforcing standards for supplier labour and human rights practices with the objective of safeguarding brand image can be difficult, if not impossible to quantify. In addition, recent research has also found that implementation of some social sustainability initiatives, including basic practices such as monitoring, does not impact performance—rather performance benefits accrue from investments in advance practices over the long term (Croom et al. 2018).

Notwithstanding the challenges of identifying the economic advantages of investments in social sustainability practices, research has linked investments in social sustainability to firm performance (e.g. Carter and Easton 2011; Esfahbodi et al. 2016). Previous research has highlighted opportunities to improve buyer financial performance, and other performance benefits, such as organizational learning and improved supplier performance, and better abilities to manage sustainability risk (Klassen and Vereecke, 2012). Stakeholder theory also provides a potential link between social performance and financial performance, suggesting that responsible behavior of a

firm can result in improved financial performance (Clarkson, 1995; Mitchell et al., 1997). Consequently, we posit that enforcement of supplier human rights, and labour practices will positively impact firm financial performance:

H4c: Enforcement of policies related to supplier human rights practices positively influences firm performance.

H4d: Enforcement of policies related to supplier labour practices positively influences firm performance.

3 Methodology

3.1 Data collection and Sample

This study is part of a larger research project that investigated purchasing trends among large North American firms from 18 industry groups: manufacturing (North American Industrial Classification System (NAICS) codes 31-33) and services (excluding the retail and wholesale sector). Issues such as emerging economy sourcing and social responsibility tend to be significant for large manufacturing and service organizations, hence providing the required sampling frame for this study. The relationships among emerging economy sourcing, use of purchasing teams, enforcement of supplier social practices and firm performance were explored using a combination of a survey and archival data from secondary sources.

The Title 1 membership list of the Institute of Supply Management (ISM) and CAPS Research membership directory were used to identify U.S. respondents on the Fortune 1000 list. Considerable time was invested prior to the questionnaire mailing to ensure that the appropriate contact person was identified and questionnaires were only sent to a senior supply executive who could be identified by name and title. The final sampling frame, which satisfied the aforementioned criteria of identifying the contact person, consisted of 643 firms. The target respondent at each

organization was the chief purchasing officer (CPO), who is responsible for the overall purchasing of materials in an organization. In an effort to increase the response rate, a modified version of Dillman (2007) method was followed. Questionnaires were mailed along with a cover letter and stamped return envelope to 643 organizations. From the initial sample frame of 643, 20 were dropped because they had ceased operation, had been inadvertently duplicated in the database or could not be delivered. Consequently, the effective sample frame was 623 organizations.

Respondents were given four options to respond: postal mail; fax; email (with a scanned copy of the survey); webpage. Two weeks after the initial mailing, reminder e-mails were sent to all non-respondents, followed by a second mailing four weeks after the initial mailing. Finally, six weeks after the initial mailing, a reminder telephone call was made to each non-respondent. Of the 623 potential respondents, 183 completed surveys were returned, resulting in a response rate of 29.4 percent. In the process of merging financial performance data from secondary sources, another 34 responses were dropped from the sample, resulting in final sample size of 149 firms and an effective response rate of 23.9 percent. The summary statistics for the sample are provided in Table 1.

Insert Table 1 Here

To examine possible non-response bias, early respondents were compared to late respondents in terms of annual sales and industry membership by conducting independent-sample t-test (Armstrong and Overton, 1977; Lessler and Kalsbeek, 1992). The results showed no significant difference between early and late responses for annual sales [$t(134) = 0.816$, $p=0.416$] and industry membership [$t(134) = 0.664$, $p=0.508$], thereby indicating that the non-response bias (NRB) is not a major concern.

3.2 *Common Method Bias*

Because the data were obtained from single respondents and during the same period of time with cross-sectional research design, common method variance may cause systematic measurement error (Podsakoff et al., 2003). The two primary ways to control for method biases are through the design of the study's procedures and statistical controls (Podsakoff et al., 2003). In this research, the procedural remedies included obtaining performance related criterion variables from archival sources (details in the section on secondary data), allowing respondents complete anonymity and assuring them that there are no right or wrong answers, and by gathering data from a second respondent from the firm. Data were collected for a second respondent from approximately 20 percent of randomly selected respondent firms. A total of 35 surveys were sent and 31 were completed and returned. The measures for dual-respondents from firms were compared using inter-rater reliability (IRR) coefficient. The IRR coefficients were computed at the construct level and were significant at the $p < 0.001$ level, with an average value of 0.689 for team usage constructs and 0.712 for social practices.

Statistical methods were also employed to check for the presence of common method bias. First, the results of Harman's single factor approach indicated lack of a common factor. However, Podsakoff et al., (2003) warns against the usefulness of this test. Therefore, a different approach of testing for bias was adopted, as suggested by Podsakoff et al., (2003). Using this approach, a first-order factor was added to the measurement model and indicators were allowed to load on this factor as well as their hypothesized constructs. The results indicated that the path coefficients and significance to the original constructs were not different between the two models, suggesting that the measures were robust in spite of the inclusion of a method factor. Based on the procedural and statistical remedies employed, we could reasonably conclude that the results were not inflated due to the existence of common method variance in the data.

3.3 *Measures*

This study uses constructs related to emerging economy sourcing, supplier social practices and purchasing team usage. The emerging economy sourcing construct was derived from a self-reported measure asking respondents to indicate the percentage of their firm's purchases from eight geographic regions. These data were used to establish the percentage of purchases from developed regions (United States, Canada, Europe, and Japan) and from emerging regions (Latin America including Mexico, China, all other Asia including India and Russia, and Africa). The percentage of purchases from emerging economies was used a measure for 'emerging economy sourcing'. One of the major advantages of using such an indirect measure is the reduction in consistency motif of respondents (Podsakoff et al., 2003), thus providing additional validity to the findings of the study. In order to capture enforcement of supplier social practices, two constructs from earlier research by Awaysheh and Klassen, (2010) were adopted. The scales, 'human rights' and 'labour practices,' represent enforcement by the buying firms of core conventions of the International Labour Organization (ILO), including upholding labour standards (Elliott and Freeman, 2003) and other basic principles regarding health and safety, wages and hours, and elimination of forced and child labour (Tsogas, 2001). Lastly, for use of purchase teams, items developed by Johnson et al., (2002) were used. The construct represents teams that bring together stakeholders from the supply chain to address issues of mutual concern, such as quality problems, new product development or supply base sustainability performance. Appendix A lists the details of all items corresponding to each construct.

3.4 *Measurement Model*

We employed confirmatory factor analysis (CFA) using AMOS v21.0.0 to evaluate the validity and reliability of the resulting multi-item measurement scales (Anderson and Gerbing, 1988). CFA

is the preferred approach in recent operations management studies, to evaluate convergent and discriminant validity of constructs (e.g. Menor and Roth, 2007). The fit statistics for the measurement model indicate good fit ($\chi^2 = 120.17$, $df = 58$, $p < 0.001$; $\chi^2/df = 2.01$; CFI = 0.976; PGFI = 0.580; RMSEA = 0.076) (Kline, 2011).

We assessed the reliability of each multi-item scale using the CFA standardized factor loadings and calculating the composite reliability: labour practices and human rights constructs had reliability scores of 0.808 and 0.915 respectively while the purchasing teams construct had a composite reliability of 0.619 (details in Appendix A), indicating that these indicators are sufficient in their representation of respective constructs (Fornell and Larcker, 1981). Although the composite reliability for purchasing teams is lower than the suggested 0.70 standard, since the construct has been adopted from previous research (Johnson et al., 2002; Johnson et al., 2007), the results were deemed appropriate for the current model. Average variance extracted (AVE) is a good indicator of convergent validity (DeVellis, 2012) and it represents the amount of variance that is captured by the construct in relation to the amount of variance due to measurement error (Fornell and Larcker, 1981). Appendix A provides the AVE values and all constructs except internal teams had AVE values exceeding 0.50, indicating that a large amount of variance was captured by each construct rather than being explained by measurement error. Convergent validity for the constructs was also assessed by the magnitude and sign of the factor loadings of the measurement items (see Appendix A). Inspection of the standardized loadings indicate that each was in its anticipated direction (i.e., positive correspondences between constructs and their posited indicators), and was statistically significant.

3.5 *Secondary Data*

This study incorporates the simultaneous use of primary and secondary data in the model to validate its hypotheses. Previous operations management and sustainability research has used several metrics for firm performance such as Return-on-Assets (ROA), Return-on-Sales (ROS) and Gross Margin (GM), when using secondary archival sources (e.g. Azadegan et al., 2013; Tang et al., 2012). We employ the most commonly used financial performance metric ROA, using the COMPUSTAT database. ROA is net income before interest and tax divided by total assets (Tang et al., 2012), and reflects how efficiently a firm uses its assets to generate profits (Azadegan et al., 2013).

3.6 *Control Variables*

Several control variables were added to the analysis to ensure robustness of results. This study included two sets of control variables, namely firm-level and industry-level control variables. Since financial performance measure was used as a dependent variable in the model, we needed to control for factors influencing this measures. Consistent with previous research, the firm-level control variables included size and prior performance related measures (Jayachandran et al., 2013). For prior performance, we used two-year lagged performance figures for ROA to control for previous performance effects. For firm size, number of employees was used as a proxy.

For industry-level controls, we employed three commonly used metrics: environmental munificence, environmental dynamism, and environmental complexity (Fernhaber and Patel, 2012). All three industry-level measures were assessed over a five-year window prior to the survey response date through data obtained from the COMPUSTAT database. In order to allow for comparisons across appropriate industry sectors, the North American Industrial Classification

System (NAICS) codes were used at the three-digit level and yearly aggregated sales were computed for each group.

Environmental munificence is a measure of growth in the industry while environmental dynamism is a measure of volatility in the industry (Keats and Hitt, 1988). We regressed aggregated industry sales over five years to get values for munificence and dynamism. The regression coefficient (β) for sales divided by the average industry sales over five years provided munificence values while the standard error of regression coefficient divided by average sales provided dynamism values. Higher β represents higher growth and higher standard error represents greater turbulence in the industry.

Environmental complexity measures the degree of concentration in an industry. It was computed by taking the sales of top four firms in an industry and dividing the sum by the total sales of the industry. Higher numbers represent less complexity while lower numbers represent high complexity indicating presence of greater number of competitors in an industry.

4 Results

We carried out path analyses of the hypothesized model using the statistical software package Amos 21.0.0. Path analysis is used when there are multiple predictions of multiple variables in a model. Since, the focus of our analysis was on the relationships, we replaced each construct with the average of its scale items. This is also appropriate, given the number of constructs, hypothesized relationships, and sample size. This estimation method has been employed in earlier operations management studies (e.g. Paiva et al., 2008; Shafiq et al., 2017), where reliability of constructs is high, as is the case in our study.

The structural model results indicate excellent model fit ($\chi^2 = 22.59$, $df = 15$, $p = 0.093$; $\chi^2/df = 1.51$; CFI = 0.988; RMSEA = 0.061) (Kline, 2011). Table 2 contains the correlations among

composite scores of all constructs in this study while Table 3 has the results for the regression paths.

Insert Table 2 and Table 3 Here

The results of our statistical analyses provided support for several of the hypothesized relationships in our proposed model. The first hypothesis (H1) explored the influence of emerging economy sourcing on use of purchasing teams and the results indicated a statistically significant relationship between emerging economy sourcing and the use of purchasing teams ($\beta = 0.189$, $p < 0.05$), signifying that firms that source globally emphasize use of purchasing teams. The second set of hypotheses (H2a and H2b) focused on the relationship between emerging economy sourcing and enforcement of supplier social practices (i.e. human rights and labour practices). Emerging economy sourcing was found to be significantly and positively related to both dimensions of supplier social practices, indicating that firms with a higher percentage of purchases from emerging countries placed a greater emphasis on enforcement of supplier human rights ($\beta = 0.169$, $p < 0.05$) and supplier labour practices ($\beta = 0.213$, $p < 0.01$).

Apart from analyzing direct relationships between constructs, we also hypothesized for mediating effect of purchasing teams on the relationship between emerging economy sourcing and enforcement of supplier social practices (H3a and H3b). Mediation refers to the transmission of the effect of an independent variable on a dependent variable through one or more other variables called mediator or intervening variables. Mediation can be full or partial: A full mediation means no direct effect of independent variable onto the dependent variable, when the mediating variable is introduced, while in a partial mediation, the direct effect diminishes but does not disappear altogether and both a direct effect and an indirect effect exist simultaneously. The Sobel (1982)

test and the Baron and Kenny (1986) approach are the two most common methods for testing hypotheses regarding mediation analysis. Baron and Kenny (1986) outline three steps to test whether a construct acts as a mediator between other constructs. The standardized loads and their significance must be calculated separately in each of these three steps.

In the first step, we tested the direct relationship between emerging economy sourcing and enforcement of supplier social practices without the purchasing team construct in the model. Emerging economies sourcing was found to be positively and significantly related to enforcement of supplier human rights ($\beta = 0.223$, $p < 0.05$) and supplier labour practices ($\beta = 0.280$, $p < 0.01$). For the second step, the relationship between emerging economy sourcing and use of purchasing teams was found to be significant ($\beta = 0.223$, $p < 0.05$). Lastly, the relationship between the use of purchasing teams and supplier social practices was tested. The results indicate that purchasing teams was positively related to enforcement of supplier human rights ($\beta = 0.171$, $p < 0.001$) and supplier labour practices ($\beta = 0.216$, $p < 0.001$), signifying the importance of purchasing team use for enforcement of supplier social practices. As per the Baron and Kenny (1986) approach, the results indicate purchasing teams are a partial mediator between emerging economy sourcing and supplier social practices. The total effect of purchasing teams on supplier social practices, which is the sum of direct and indirect effects, is provided in Table 3.

As noted earlier, H4 linked emerging economy sourcing, purchasing team use and enforcement of supplier social practices to firm performance. We found a mixed set of results. As hypothesized, emerging economy sourcing (H4a: $\beta = 0.222$, $p < 0.01$) and purchasing teams (H4b: $\beta = 0.141$, $p < 0.05$) were found to be positively related to firm performance. However, we did not find an association between enforcement of human rights (H4c: $\beta = -0.092$, $p = \text{NS}$) nor labour practices (H4d: $\beta = -0.002$, $p = \text{NS}$) with firm performance. Although not hypothesized, we did check for

the mediating effect of the enforcement of supplier social practices on the relationship between purchasing teams and firm performance. Based on the results of H4c and H4d, no evidence was found that enforcement of supplier social practices is either a partial or full mediator.

To explore the robustness of these results, we employed a different performance metric of Return-on-Sales (ROS) to test for firm performance. ROS is net income before interest and tax divided by sales (Azadegan et al., 2013) and represents the efficiency of a firm to generate profits from sales. The results of the robustness test indicated that the direction and magnitude of the estimates were consistent with the results for ROA.

5 Discussion

Organizations are being challenged by expectations of stakeholder groups to improve the social performance of their supply chains. The risks of poor social sustainability performance are significant and the challenges can be complex in global supply chains that include suppliers located in emerging economies (Huq et al., 2016). While progress has been made on research that addresses the impact of environmental sustainability on firm performance, this paper fills a gap in the literature by investigating how firms might better accomplish internal and external integration in their supply chains with the objective of supporting improved supplier labour and human rights practices. Previous research has examined how firms have used various arm's-length and collaborative supplier management practices to manage social sustainability performance in their supply chains, such as supplier monitoring (e.g., Gualandris et al., 2015) and supplier development (e.g., Busse et al. 2016). This study examines the role of purchasing activities on supplier social practices in the context of emerging economy sourcing.

The results point to several important findings that contribute to a better understanding of emerging economy sourcing, the use of purchasing teams, enforcement of human rights and social

practices, and firm performance. The respondents in our research were large North American firms with a diverse supply base, and we found that they took different approaches to the way in which they managed supplier social practices depending on the geographic region where the suppliers were located. As firms increased their purchases from emerging economies, they were more likely to be concerned with enforcement of supplier social practices in the areas of human rights and labour practices. Thus, emerging country sourcing initiatives come with the need to make investments in resources designed to manage supply chain social sustainability performance. This behavior could be a result of pressure from stakeholder groups—internal (e.g., employees), customers, suppliers and the local community in which the organization operates (Clarkson, 1995; Mitchell et al., 1997)—who expect organizations to ensure that their supply chain and their suppliers are socially responsible (Wolf, 2014).

As proposed in H3a and H3b, a greater emphasis on purchasing teams led to increased enforcement of human rights and labour practices on suppliers located in emerging economies. Purchasing teams represent one method to enhance internal and external integration through the involvement of non-supply personnel, such as representatives from other functions and suppliers. It would appear that purchasing teams are an approach that firms use to ensure that suppliers adopt appropriate policies and procedures related to their social practices.

Previous research has demonstrated the performance benefits of cross-functional teams in purchasing and supply chain management (e.g. Enz and Lambert, 2015), and research in the organizational behavior literature has found that the use of cross-functional teams leads to improved decision-making for complex tasks when compared to individuals and homogeneous teams (Edmondson and Nembhard, 2009). Furthermore, stakeholder theory stresses that effective stakeholder management can be an important aspect of economic performance (Harrison et al.,

2010). This paper contributes to this research by providing an additional benefit of cross-functional teams, namely the increased enforcement of human rights for suppliers from emerging economies.

Using a combination of a large-scale survey and multi-period archival data, this research also provided empirical evidence that emerging economy sourcing leads to improved financial performance. The supply management literature points to several potential advantages of emerging economy sourcing (Stanczyk et al., 2015). Therefore, improved performance could be driven by a number of factors in addition to lower labour costs, such as access to distinct resources such as suppliers with superior capabilities, including technology and product expertise. Further research can establish the reasons for improved performance and the capabilities required by organizations to harvest the performance benefits of emerging economy sourcing.

This research also responds to recent calls in the literature to empirically investigate the linkage between social sustainability and firm performance (Thornton et al., 2013). Much of the previous research in this area has relied on either anecdotal evidence or on a small number of case studies (Huq et al., 2016). The findings did not support our hypotheses that enforcement of human rights and labour practices contribute to improved firm performance. There could be numerous reasons for the non-significant relationship. First, some studies have pointed out that there is generally a time lag between a firm implementing sustainability programs and having an impact on the financial performance. In addition, higher costs and decreased financial performance is not totally unexpected during the initial implementation stages of a sustainability initiative. Second, enforcement of process-based socially responsible procurement practices, such as supplier monitoring, are frequently arm's-length, taking place outside the buying firm. The principal objective is often to minimize risk to the buying firm and to ensure compliance with regulations and codes of conduct, as opposed to improving supply chain performance (Reuter et al., 2010;

Klassen and Vereecke, 2012). Lastly, a relatively small sample in the study and a cross-sectional design could also potentially reduce the power to detect significant relationships. Additional research is needed to better understand the relationship between social sustainability and firm performance.

There are alternative approaches to arm's-length methods to enforcing process-based supplier social practices, such as collaborative methods, including supplier development efforts (Busse et al., 2016). However, it is unlikely that large firms will discontinue the use of techniques such as monitoring activities and third-party certifications for suppliers in emerging economies. Future research can investigate how and when to incorporate different approaches to managing supplier social performance.

6 Conclusion

Drawing on the sustainability, supplier relationship management, and stakeholder literatures, this research examined the relationship between emerging economy sourcing, the use of purchasing teams, and the impact on enforcement of supplier social practices, and firm performance. Findings indicate that emerging economy sourcing was significantly and positively related to the use of purchasing teams and to both dimensions of supplier social practices. Results also indicate that purchasing teams was positively related to enforcement of supplier human rights and supplier labour practices. Lastly, emerging economy sourcing and purchasing team were found to be positively related to firm performance.

This paper makes three contributions to the literature. First, it fills a void in the socially responsible procurement literature by examining the role of purchasing activities on supplier social practices. Second, the study investigates the mediating role of purchasing teams on the relationship between emerging economy sourcing and enforcement of supplier social practices and firm

performance. Third, findings demonstrate the performance benefits of sourcing from emerging economies, and that firms also make simultaneous investments to support capabilities related to enforcement of supplier social practices.

6.1 Implications for Management Practice

This research has significant implications for practice and raises additional questions for further examination. There has been considerable debate in the supply chain literature about the benefits of global sourcing, specifically related to the total costs of sourcing in emerging economies (e.g. Kamann and Van Nieulande, 2010; Kusaba et al., 2011). Our research indicates a positive relationship between sourcing from emerging economies and firm performance. Although this research was not designed to evaluate the efficacy with which respondents conducted their global sourcing initiatives, the results indicate that emerging economy sourcing can contribute to improved firm performance. Specifically, when considering that corporate reputations are deemed to be at stake, managers of firms that are well-known and reputable are those that need to ensure that their brands are not blemished by any negative social practices that might be occurring in the supply chain. The firm's reputation, and ultimately overall performance, would be impacted by such practices. Thus, the potential risks and costs of poor supply chain social practices must be a priority for procurement managers.

The standard reason for sourcing from emerging economies is the attraction of low cost. Enforcement of standards for supplier human rights and labour practices by large firms can be viewed as a way of mitigating risk. In developed countries, enforcement practices, such as supplier monitoring, are less common, presumably because of government regulations, union contracts, culture, and standard social practices. The absence of these reinforcers in emerging regions places

a burden on the purchaser to assure that supplier social practices meet a minimum standard in the eyes of their various international supply chain members as well as other stakeholders.

Previous research has advocated that sustainability considerations should be included in sourcing decisions, along with traditional criteria of cost, delivery and quality (Shafiq et al., 2017). This research demonstrated that large organizations are using purchasing teams as one approach to managing supplier sustainability performance. In the context of this research, purchasing teams include the participation of internal (e.g., cross-functional teams) and external stakeholders (e.g., suppliers). Therefore, the engagement of other functions, such as operations and engineering, and suppliers through the use of purchasing teams provides an opportunity to improve supply chain labour and human rights practices.

Enforcement of policies for supplier social practices, if seen as an essential part of successful sourcing, raises more questions. Should the purchaser outsource supplier monitoring, develop an in-house capability or join a consortium of other purchasers sourcing in the same region? Similarly, who should be members of the purchasing team? Who should be in charge of such teams? These and all the other standard team questions arise. Most large companies, such as Walmart, Apple and Nike, have developed their own standards for social and environmental practices using input from a variety of stakeholder groups. Third-parties might then assist with monitoring suppliers to enforce compliance with these standards, although fulfillment is not necessarily assured because information remains difficult to verify.

The link between sourcing in emerging economies and financial performance is also noteworthy. However, this research is unable to establish the underlying reasons for improved financial performance, including the direct effects of low wage rates versus other factors. A proper assessment of emerging economy sourcing obviously should include a thorough evaluation of total

costs of ownership. Increasing costs for wages, transportation, and financing inventories can erode the financial benefits over the medium- and long-term.

6.2 Limitations and Opportunities for Future Research

As with other studies, this research has limitations. First, the survey methodology used in this research provides insights regarding what respondents were doing without providing an in-depth understanding of why and how. Case-based research can be used to delve into these issues. Second, although the sample was limited to large North American firms, additional research can explore initiatives and changes among European or Asian firms, or alternatively at small- and medium-size enterprises (SMEs).

There are many opportunities for future research. First, as previously stated, case based research could examine global sourcing strategies of firms, focusing on how they execute policies related to supplier social practices. Such research could provide insights on issues related to supplier selection and supplier management, with particular emphasis on how suppliers from emerging economies are managed differently from suppliers located in developed economies. An interesting point of further investigation in this area is the use of purchasing teams in sourcing from emerging economies to shed light on team composition, costs, and a variety of other issues. In addition, whether certain monitoring practices are deemed to be more effective and whether these are universal or unique to different regions or industries might reveal gaps and opportunities.

Another future study could be the examination of emerging country sourcing practices of SMEs, using either a survey or case studies. SMEs do not have access to the resources available to the large firms that participated in our study, and additional research can provide insights regarding how their global sourcing practices in emerging economies differ from large firms. Finally, studies that investigate the impact of social practices on performance could be very

informative to both the academic and the practitioner communities. If suppliers are deemed to be deficient in social practices, what short and long-term costs would be incurred by the purchaser requesting changes? One way this could be achieved is through longitudinal research. It could be useful to track specific changes over time in similar practices, geographical areas, supplier capabilities and a host of environmental factors.

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Table 1: Sample Demographics

Characteristics	N	%
Firm Sales		
Less than \$1 billion	5	4%
\$1 billion to \$5 billion	45	33%
\$5 billion to \$10 billion	36	26%
Greater than \$10 billion	50	37%
Respondent Position		
Vice President	96	71%
General Manager	5	4%
Director	21	15%
Manager	6	4%
Other	8	6%
Industry Cluster		
Discrete	26	19%
High-Cap Service	18	13%
Low-Cap Service	45	33%
Process	40	29%
Resource	7	5%
Total	136	100%

Table 2: Construct-level correlation table

		1	2	3	4	5
1	Emerging Economy Sourcing	16.96 ^a				
2	Purchasing Teams	.189*	3.39			
3	Labour Practices	.280**	.395**	3.02		
4	Human rights	.223**	.315**	.735**	3.45	
5	Return on Assets (ROA)	.243**	.190*	0.112	0.079	0.057

^aThe diagonal has the mean composite scores for constructs

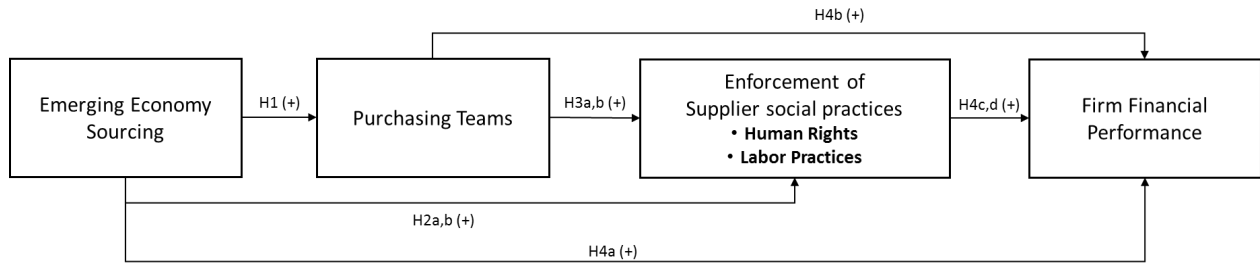
** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

Table 3: Path Model Results

	Variables			Std. β	S.E.	C.R.	p- value
H1	Emerging Economy Sourcing	--->	Purchasing Teams	0.189	0.004	2.24	*
H2a	Emerging Economy Sourcing	--->	Human rights	0.169	0.006	2.065	*
H2b	Emerging Economy Sourcing	--->	Labour Practices	0.213	0.006	2.714	**
H3a	Purchasing Teams	--->	Human rights	0.283	0.134	3.458	***
H3b	Purchasing Teams	--->	Labour Practices	0.354	0.145	4.518	***
H4a	Emerging Economy Sourcing	--->	ROA	0.222	0	3.225	**
H4b	Purchasing Teams	--->	ROA	0.141	0.006	1.973	*
H4c	Human rights	--->	ROA	-0.092	0.005	-0.955	
H4d	Labour Practices	--->	ROA	-0.003	0.005	-0.032	
<i>Controls</i>							
Firm- Level	Two-year lagged ROA	--->	ROA	0.552	0.073	8.371	***
	Firm Size	--->	ROA	-0.091	0.004	-1.373	0.17
Industry- Level	Munificence	--->	ROA	-0.659	0	-1.943	0.052
	Dynamism	--->	ROA	0.594	0	1.754	0.079
	Complexity	--->	ROA	-0.005	0.027	-0.074	0.941

Figure 1: Theoretical Model



Appendix A

Items ^a	Factor Loading (std.)	Mean ^b	
Purchasing Teams			
In performing the purchasing/supply function, to what extent does your firm make use of the following:			
Purchasing Teams (Composite Reliability = 0.619^c, AVE = 0.351^d)			
Purchasing councils (purchasing personnel only)	0.59	3.09	0.16
Supplier councils (primarily key suppliers)	0.62	2.40	0.13
Commodity teams (purchasing personnel only)	0.56	3.66	-
Cross-functional teams	0.42	4.10	0.10
Enforcement of Supplier Social Practices			
To what extent does your firm have the following policies and procedures related to your key suppliers? (i.e., the 15-20% most important suppliers that provide strategic products or services).			
Human Rights Practices (Composite Reliability = 0.915 , AVE = 0.731)			
Ensures that our suppliers do not use child labour	0.98	3.39	0.02
Ensures that our suppliers do not use forced labour (e.g. prison labour)	0.99	3.34	-
Ensures that suppliers do not use sweatshop labour	0.99	3.35	0.01
Labour Practices (Composite Reliability = 0.808, AVE = 0.519)			
Ensures that our suppliers have regulated over-time wage policies (e.g. higher wage for over-time work)	0.81	2.85	0.08
Ensures that our suppliers allow their employees to associate freely (e.g. join or create a union)	0.95	2.70	0.08
Ensures that our suppliers do not discriminate against its own workers	0.85	2.85	0.07
Ensures that our suppliers provide a healthy and safe working environment for their employees	0.89	3.33	-

^a All items were measured on a 5-point Likert scale, ranging from 1(None) to 5(Extensive)

^b Represents mean score of all respondents.

^c Composite reliability values equal or exceeding .70 indicate strong scale reliability.

^d Average variance extracted values exceeding .50 indicate that the measures are reflective of the construct

^e This regression weight was fixed at 1.0. The S.E. was not estimated in these cases. However, by fixing a different parameter, we determined that the estimates of these scaled values are also statistically significant with $p < .01$.

Descriptive Statistics: Emerging vs Developed Economy Sourcing

Region	Mean	Std. Dev
Developed Economy Sourcing	84.9	16.9
Emerging Economy Sourcing	15.1	16.9

Descriptive Statistics: Financial Performance

Performance	Mean	Std. Dev
Return on Assets (ROA)	0.057	0.062